

EUROPEAN PATENT OFFICE  
U.S. PATENT AND TRADEMARK OFFICE

CPC NOTICE OF CHANGES 1437

DATE: MAY 1, 2023

PROJECT DP11956

**The following classification changes will be effected by this Notice of Changes:**

<u>Action</u>	<u>Subclass</u>	<u>Group(s)</u>
<b>DEFINITIONS:</b>		
Definitions Modified:	B82B	subclass

**No other subclasses/groups are impacted by this Notice of Changes.**

**This Notice of Changes includes the following [Check the ones included]:**

1. CLASSIFICATION SCHEME CHANGES

- A. New, Modified or Deleted Group(s)
- B. New, Modified or Deleted Warning(s)
- C. New, Modified or Deleted Note(s)
- D. New, Modified or Deleted Guidance Heading(s)

2. DEFINITIONS

- A. New or Modified Definitions (Full definition template)
- B. Modified or Deleted Definitions (Definitions Quick Fix)

3.  REVISION CONCORDANCE LIST (RCL)

4.  CHANGES TO THE CPC-TO-IPC CONCORDANCE LIST (CICL)

5.  CHANGES TO THE CROSS-REFERENCE LIST (CRL)

## 2. A. DEFINITIONS (modified)

### B82B

#### Relationships with other classification places

Replace: The existing text of the Relationships with other classification places with the following updated text.

General relationship of B82B with section C:

The terminology "particularly shaped configurations distinct from both naturally occurring and chemically produced chemical or biological arrangements composed of similar matter" in the definition statement is intended to preclude classification of chemical or biological structures per se in this subclass that are similar in size. As a practical matter, what is intended by "distinct" in this phrase is that the only nanosized structures appropriate for this subclass are those that accomplish a function that is not inherent in the chemical or biological composition from which they are formed (e.g. a nanosized structure shaped so that an atom or molecule component is movable between locations to act as a switch in an electrical operation would be classified in B82B even if it were formed using a method that included a chemical or biological step).

The subclasses under section C, "Chemistry; Metallurgy", specifically provide for the majority of these excluded chemical or biological structures per se, or specially adapted processes or apparatus for the manufacture or treatment thereof (e.g. in classes C08, C12).

For guidance as to whether classification in subclass B82B applies, the following general principles of classification for B82B under CPC are given.

A device is classified in B82B if:

- The device consists of a limited number of atoms, molecules or nanostructures, and
- The manufacturing process is a bottom-up process that manipulates and assembles a limited number of atoms, molecules or nanostructures.

A method or an apparatus for manufacturing nanostructures is classified in B82B if:

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- The method is a bottom-up process.
- The apparatus manipulates and assembles a limited number of atoms, molecules or nanostructures.

In relation to B82B NOTE 3, which is about further classification in subclass B82Y, it is noted that subclass B82Y refers to obligatory supplementary classification relating in particular to specific uses or applications of nanostructures. Since there is no specific need to tag documents already classified in B82B for their nanotechnological aspects, when further allocation in B82Y would not identify anything not already derivable from allocated B82B CPC symbols, the allocation of additional B82Y CPC symbols should be relatively restricted.

## References

### *Informative references*

Insert: The following new tables rows (or references) into the existing Informative references table.

Nanostructures and nanoelectromechanical systems [NEMS] formed by top-down processes	B81B, B81C
Carbon nanostructures, e.g. carbon nanotubes, formed by chemical processes	C01B 32/15
Semiconductor nanowires, nanotubes or whiskers	H01L 29/06

## Glossary of terms

Insert: A period at the end of the Nanosize definition sentence and at the end of the Nanostructure definition sentence.

Controlled geometrical size below 100 nanometres (nm) in one or more dimensions.

Entity having at least one nanosized functional component that makes physical, chemical or biological properties or effects available, which are uniquely attributable to the nanoscale.